# Ponca Bluffs

landscape
includes the steep
bluffs of the
Missouri along the
un-channelized
Missouri River in
Dakota, Dixon,
and Cedar
counties. This
reach of the
Missouri River has
been designated



as a National Recreational River. The majority of the bluffs support eastern deciduous forest dominated by bur oak, basswood and ironwood. Remnants of tall-grass prairie and northern loess shale bluff occur on the bluffs. Cropland is scattered on rolling hills throughout the landscape. Ponca State Park is the largest protected area in the landscape.

## Natural Legacy Demonstration Site

#### Ponca State Park - Nebraska Game and Parks Commission

Ponca State Park contains 1900 acres and includes the steep bluffs covered in hardwood forest and floodplains of the un-channelized Missouri River. Ponca State Park is located in the portion of the Missouri River designated as a National Recreational River. Restored sandbars in the Missouri River and backwater provide habitat for several listed species, while allowing the channel to meander restores the dynamic floodplain. This park has bur oak basswood-ironwood forest, dry-mesic bur oak forest and woodland, and upland tall-grass prairie.

## Stresses Affecting Species and Habitats

- Specific livestock grazing and haying practices that may reduce native plant diversity and promote uniform habitat structure
- Invasive plant species in native woodlands by eastern red cedar, garlic mustard, common buckthorn, leafy spurge and exotic plants
- Tree and shrub encroachment of prairie remnants
- Housing development and other forms of fragmentation
- High-grade logging of woodlands
- Excess deer browsing
- Poorly-sited utility-scale wind turbines

# **Conservation Strategies**

- Implement ecologically-sensitive planned grazing and prescribed fire strategies in native grasslands on private lands
- Conduct annual surveys and implement control programs on conservation lands and nearby private lands for garlic mustard, common buckthorn and other invasive woodland plants.
- Coordinate with landowners interested in using conservation easements and voluntary fee title acquisition to protect key habitats from development and commercial logging of mature forests
- Continue implementation of the Ponca State Park management plan including tree and shrub thinning in park woodlands, implementation of prescribed fire, and restoration of native grasslands and wetlands within the floodplain
- Improve access to and harvest of deer
- Work with wind energy companies to select turbine sites that minimize fragmentation and impacts to native species. Avoid placing wind turbines and transmission lines in native plant communities and on bluff tops where they contribute to higher bird and bat mortality. Wind farms should not be located within the recommended radius of prairie grouse leks and nesting grounds. Turbines can be halted temporarily during peak migration periods for bats and birds. Pre- and post-construction monitoring should be implemented. See Nebraska Game and Parks Commission guidelines for wind energy development.

### **Collaborative Conservation Opportunities across State Borders**

Coordinate with South Dakota organizations, particularly efforts to benefit shared species of greatest conservation need on the NE Ponca Bluffs/SD Missouri River Ecoregion border (i.e., Union, Clay, and Yankton Counties in SD). Identified species include bald eagle, interior least tern, piping plover, and regal fritillary. Species lists may be modified as new information becomes available. For example, South Dakota Game, Fish and Parks completed an osprey reintroduction project along the lower Missouri River in Clay and Yankton counties in 2010. Several nesting platforms were placed in the reintroduction area below Gavins Point Dam to encourage new nesting pairs. It is likely that new nesting pairs may breed in Nebraska or South Dakota.

Coordinated habitat management actions (e.g., strategic grazing) should mirror medium to high priority conservation goals as identified in the South Dakota Comprehensive Wildlife Conservation Plan. Collaborative conservation across state borders should include researchers, federal and non-profit environmental program coordinators, and landowners, particularly those with properties extending over state lines. It will be necessary to identify and develop staffing and funding sources for implementation of conservation actions beyond state boundaries.

## Tier I At-risk Species

#### Plants:

American Ginseng<sup>4</sup>

#### Animals:

Bell's Vireo Greater Prairie Chicken Wood Thrush Regal Fritillary

## **Aquatic Communities:**

None

#### **Terrestrial Communities:**

Bur Oak-Basswood-Ironwood Forest\* Dry-Mesic Bur Oak Forest and Woodland\* Dry Upland Bur Oak Woodland\* Freshwater Seep Upland Tall-grass Prairie\* Northern Loess/Shale Bluff Prairie\* Eastern Sandstone Bluff and Cliff\*

<sup>\*</sup> Priority for conservation in this BUL

1 This is the only BUL where the species is known to occur

2 Known to occur in only one other BUL

3 Known to occur in only two other BULs

4 Known to occur in only three other BULs